Federal Communications Commission Workshop: Development of the Consolidated Licensing System

April 7, 2010

Working for Wireless *Everywhere*

PCIA – The Wireless Infrastructure Association

Working for wireless everywhere

- PCIA is the principal trade association representing the companies that comprise the wireless telecommunications infrastructure industry. Our members include licensees, infrastructure providers, and services firms. PCIA supports the infrastructure necessary to make wireless communications available at all times and places.
- Founded in 1949, PCIA has a distinguished history of helping build the industries that comprise the wireless telecommunications sector and facilitating the emergence and growth of core wireless services.
  - **Frequency Coordination Services** – One of the first FCC-certified frequency advisory committees. PCIA has processed hundreds of thousands of applications for licenses and coordinated more of the nation's spectrum than virtually any other FAC.
  - **AWS Clearinghouse** – FCC-authorized cost-sharing clearinghouse to facilitate spectrum clearing and deployment of advanced wireless services. PCIA helped conceive the cost-sharing concept in the early 1990s to pave the way for PCS. Recognized as a global leader, PCIA's processes have been benchmarked by 7 countries www.awsclearinghouse.com
  - **The DAS Forum** – a broad-based organization dedicated to the development of the distributed antenna systems (DAS) component of the wireless network (www.thedasforum.org)
  - **The State Wireless Association Program (SWAP)**– a network of 26 state associations, involving 37 states (www.swaprogram.net)
  - **Women in Wireless Leadership Forum (WWLF**) – an organization of professional women in the wireless communications industry (www.wwlf.org)

General CLS Migration Considerations

Electronic Filing, Correspondence, and Notifications

- Electronic Filing Mandates. Approximately 15 – 25% of PCIA's frequency coordination customers (usually small scale land mobile licensees) do not use a computer or have access to the Internet. However, electronic filing is generally not problematic as third parties file electronically on their behalf. *Significant* problems exist, however, with FRN passwords. Many licensees simply do not know their FRN password. Accordingly, many simple renewals/administrative updates that could be done via the Internet are, in fact, prepared using paper. FRN passwords are especially problematic in large, fluid corporations, very small-scale licensees who rarely use their FRN, and M&A situations. PCIA recommends that the Commission pay specific attention to this key issue.
- "New Media." As pointed out in the FCC's National Broadband Plan, wireless devices will play an increasingly important role in consumers' interaction with the Internet. PCIA recommends that, notwithstanding security concerns, the Commission allow maximum use of these devices where practicable for certain applications (STAs, renewals, administrative updates, etc.) and eventually for all interactions with the FCC.
- Electronic Authorizations. PCIA believes that electronic versions of authorizations should be deemed official authorizations and that records should be allowed to be stored electronically.

General CLS Migration Considerations

Application Process

- Communications to Applicants. Because so many applicants do not have access to computers or the Internet, because of applicant login challenges with FRN passwords, and because email addresses change frequently, PCIA recommends that applicants retain the option to receive official communications (notifications and authorizations) via paper and regular mail. In addition, notices should be issued to the applicant, contact of record, *and the frequency advisory committee* where applicable.
- Embedded Performance Support Systems (EPSS). PCIA strongly encourages maximum use of EPSS and integrated help tools as contemplated in the CLS manager to make applications as simple and error free as possible and to help users interact with and navigate the database more efficiently and effectively., i.e., pre-filling/auto-populating fields, previewing an application before filing out all of the required data fields, allowing third-party access to "draft" applications, performing live "error checks," enabling copy/paste of data fields and the creation of templates, not requiring the form to be completed sequentially, allowing applicants to "over-ride" certain fields if there is a good reason, provided they file a waiver request or justify with comments, etc.
- Consolidating the Commission's Registration System (CORES) and CLS. PCIA recommends that the CORES be fully integrated with CLS. CORES should serve as the user profile portion of CLS with contact information should be mapped to all relevant aspects of CLS, thereby enabling any updates to be automatically updated in all other areas of CLS. The FCC should also focus on the challenges with FRN passwords. Creating sub-accounts for a single FRN as well as an intuitive password reset process may help.

General CLS Migration Considerations

Application Process (continued)

- Application Procedural Rules. Irrespective of specific application procedure rules, PCIA advocates that applications be as streamlined and user friendly as possible.
  - Batch Filing. PCIA does strongly recommend that the Commission continue to allow batch filing of applications. However, with the ULS EBF system, if the EBF file fails edit checks (i.e., contains an invalid character), the entire file is rejected. PCIA recommends that the process be changed to allow all applications passing the edit checks to be accepted and processed, rejecting only those containing errors. Also, currently, there is no way to easily locate the invalid character. PCIA recommends that the error/rejection message highlight the problem character so that it the issue can be quickly resolved and application re-filed.
  - Application Withdrawal. Currently, the ULS does not allow users to withdraw pending applications. PCIA recommends that this feature be added.

General CLS Migration Considerations

Application Process (continued)

- Terminology. PCIA does not necessarily advocate the use of one term over another but notes that each term should have a distinct and consistent meaning across the Commission and that terms should be defined in a glossary housed on the CLS site. Additionally, legacy database users should be notified of any changes in terminology or definitions.

- Preservation of Features. PCIA recommends that the ULS Search Features on the General Menu be preserved and taken into consideration as the basis for search features for other aspects of the CLS.

General CLS Migration Considerations

Access to CLS Data

- Application and Licensing Data. PCIA and our member companies and customers use the data in the legacy ULS to search for individual applications or licenses, to verify licensing data, to conduct radius searches and apply for licenses, and to monitor status of licenses.

- Tower Siting and Tower Registration Data. PCIA's members use the tower siting/registration data in the legacy ASR to register structures and locate prospective transmit sites in a specific geographic location.

- Data to Support Public Access. PCIA believes that the appropriate amount of data currently exists in the legacy databases; however, some of the legacy databases are difficult to navigate for the casual user. Creating more intuitive and user-friendly graphical interfaces, like the spectrum dashboard, would be beneficial. In addition, PCIA imports the ULS database on a regular basis to support its frequency coordination services function. The Commission should continue to make this data available via text files or a standard spreadsheet.

General CLS Migration Considerations

Access to CLS Data (continued)

- Historical Data. PCIA urges the Commission to migrate all existing data into the CLS. In the case of the ULS migration, large amounts of pre-ULS data were not migrated to ULS, which meant that vital information used to make frequency assignments or research existing licenses was no longer available. PCIA urges the Commission to migrate all existing data.
- Data Conversion. In the past there were two different formats for coordinates – Datum 27 and Datum 83. The Commission should only accept Datum 83 going forward and allow authorized users to covert current data. In addition, authorized representatives (contact of record or frequency advisory committees) should have the ability to change FRN information in pending applications. Also, as a general matter, pre-populating and auto-filling fields will help preserve data integrity and, ultimately, data accuracy.
- Mapping Capabilities. PCIA recommends that the CLS combine map data available for market areas with site-specific data available from the (ULS) licensee database. Doing so would allow users to plot where specific licensees are located in relation to the maps.

General CLS Migration Considerations

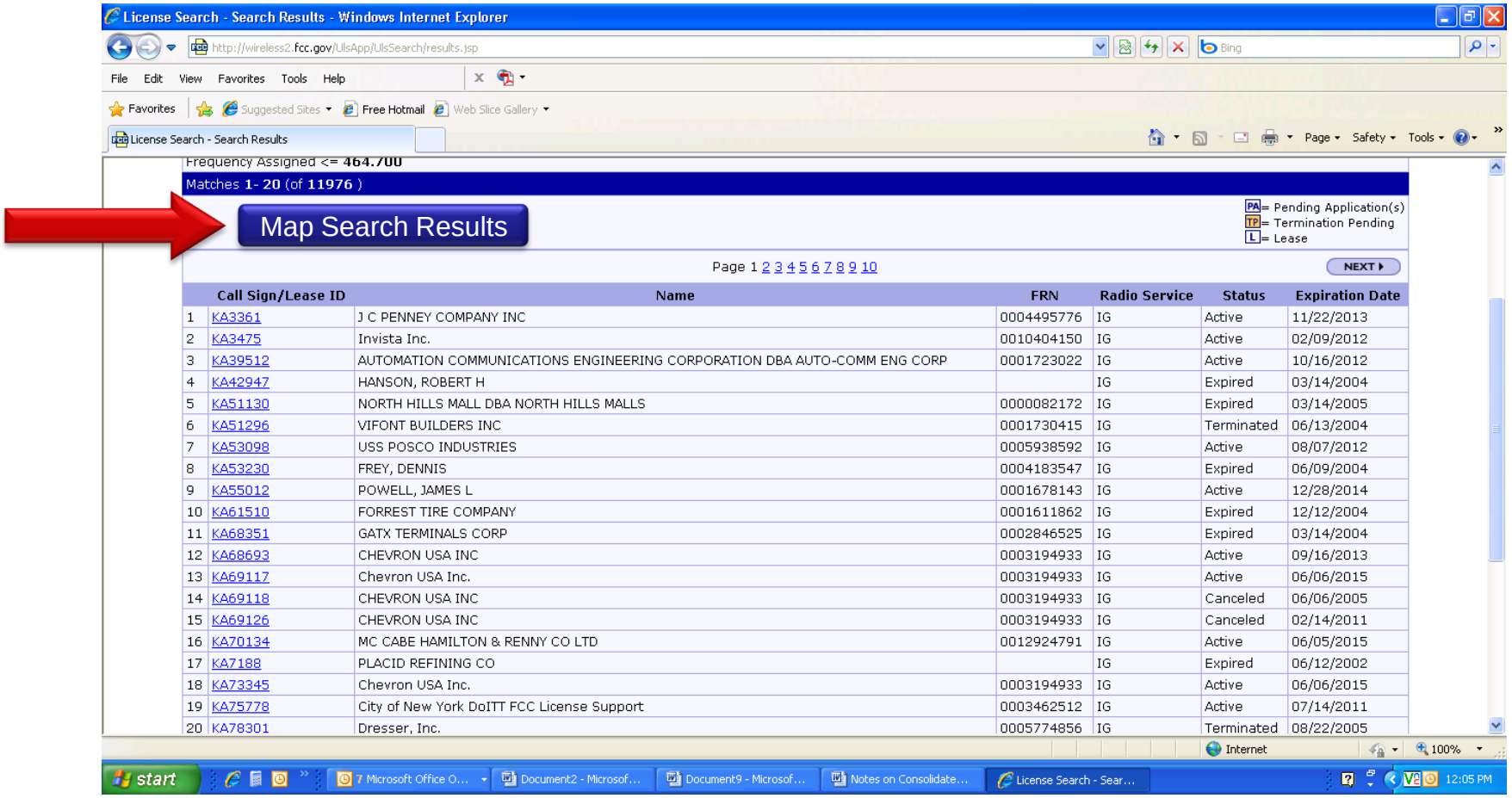
Access to CLS Data (Continued)

- Mapping Capabilities (continued). The following is a list of map schemes the FCC has for all of its different licenses. Having the ability to overlay ULS search results over any of these boundary maps would be very helpful:
  - **Automated Maritime Telecommunications System**
  - **BTA -** Basic Trading Areas
  - **BRS -** Broadband Radio Service
  - **CEA –** Component Econ Areas
  - **CMA (Or MSA & RSA) –** Cellular Market Areas
  - **EA** Economic Areas
  - **EA (GOM)** Economic Areas including Gulf of Mexico
  - **EAG** Economic Area Groupings
  - **EA & EAG** 220 MHz Economic Area Groupings
  - **MEA** Major Economic Areas (Basic)
  - **MEA** Major Economic Areas
  - **MTA** Major Trading Areas
  - **REAG** Regional Economic Area Groupings
  - **RPC** Regional PCS Areas
  - **GSA** – Geographic Service Area
  - **Radius of Operation/Area of Operation –** Most PCIA Coordination licensees will have this operation area.

General CLS Migration Considerations

Access to CLS Data (Continued)

- Mapping Capabilities (continued). For example, a ULS search yields the following tabular results. PCIA recommends placing a button on the search result page to map the results. This would then open a new window.



Frequency Assigned <= 464.700

Matches 1- 20 (of 11976)

PA= Pending Application(s)
TP= Termination Pending
L= Lease

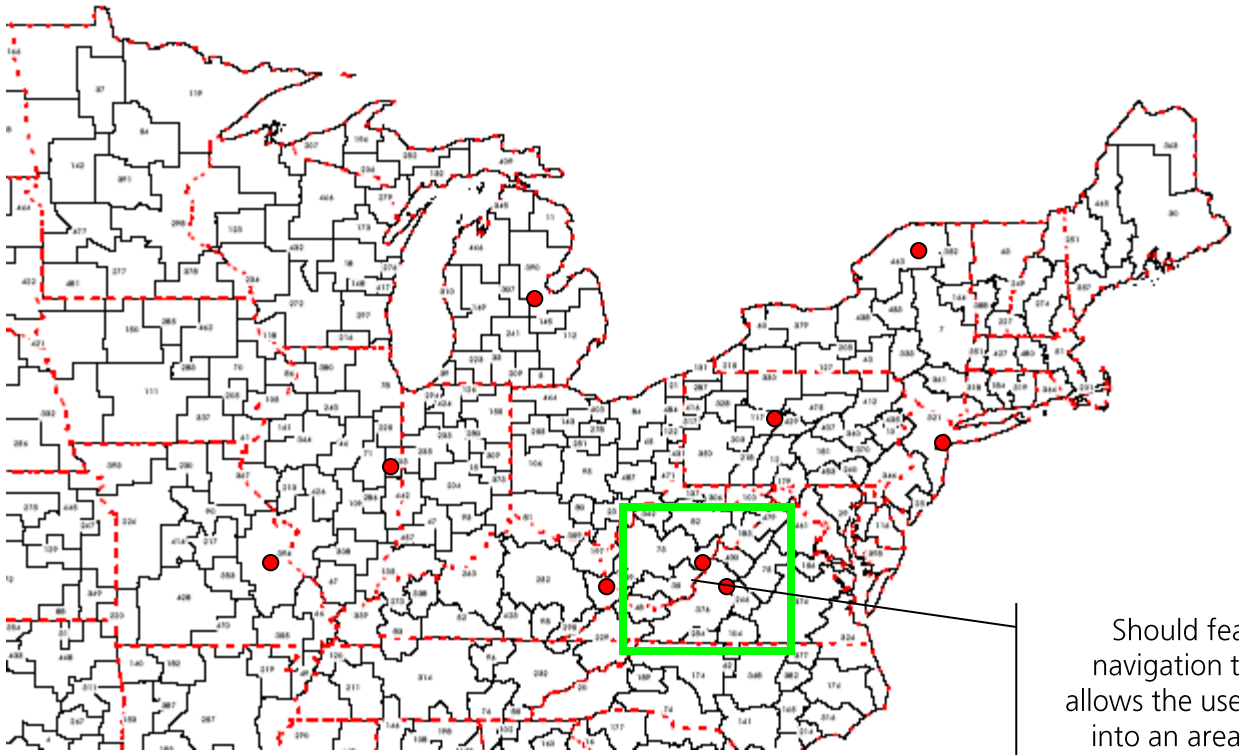
Page 1 2 3 4 5 6 7 8 9 10 NEXT

	Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1	KA3361	J C PENNEY COMPANY INC	0004495776	IG	Active	11/22/2013
2	KA3475	Invista Inc.	0010404150	IG	Active	02/09/2012
3	KA39512	AUTOMATION COMMUNICATIONS ENGINEERING CORPORATION DBA AUTO-COMM ENG CORP	0001723022	IG	Active	10/16/2012
4	KA42947	HANSON, ROBERT H		IG	Expired	03/14/2004
5	KA51130	NORTH HILLS MALL DBA NORTH HILLS MALLS	0000082172	IG	Expired	03/14/2005
6	KA51296	VIFONT BUILDERS INC	0001730415	IG	Terminated	06/13/2004
7	KA53098	USS POSCO INDUSTRIES	0005938592	IG	Active	08/07/2012
8	KA53230	FREY, DENNIS	0004183547	IG	Expired	06/09/2004
9	KA55012	POWELL, JAMES L	0001678143	IG	Active	12/28/2014
10	KA61510	FORREST TIRE COMPANY	0001611862	IG	Expired	12/12/2004
11	KA68351	GATX TERMINALS CORP	0002846525	IG	Expired	03/14/2004
12	KA68693	CHEVRON USA INC	0003194933	IG	Active	09/16/2013
13	KA69117	Chevron USA Inc.	0003194933	IG	Active	06/06/2015
14	KA69118	CHEVRON USA INC	0003194933	IG	Canceled	06/06/2005
15	KA69126	CHEVRON USA INC	0003194933	IG	Canceled	02/14/2011
16	KA70134	MC CABE HAMILTON & RENNY CO LTD	0012924791	IG	Active	06/05/2015
17	KA7188	PLACID REFINING CO		IG	Expired	06/12/2002
18	KA73345	Chevron USA Inc.	0003194933	IG	Active	06/06/2015
19	KA75778	City of New York DoITT FCC License Support	0003462512	IG	Active	07/14/2011
20	KA78301	Dresser, Inc.	0005774856	IG	Terminated	08/22/2005

General CLS Migration Considerations

Access to CLS Data (Continued)

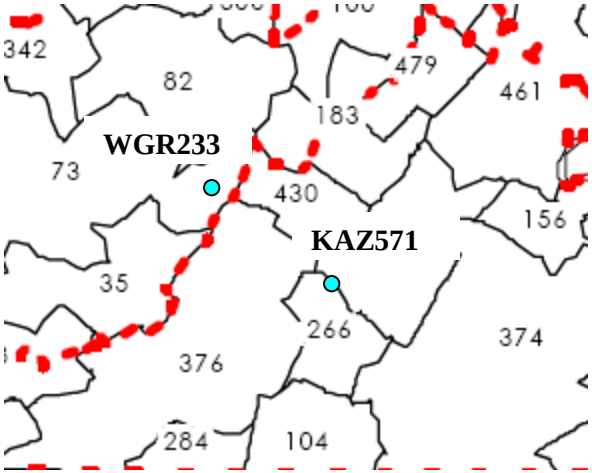
- Mapping Capabilities (continued). The new window then displays the map. It can be nationwide or allow the user to zoom. This example depicts a BTA boundary map.



General CLS Migration Considerations

Access to CLS Data (Continued)

- Mapping Capabilities (continued). The user can zoom in for more detail or choose to display the map with the operating radius or area of operation of the call sign locations marked on the map.



General CLS Migration Considerations

Phased-in Implementation

- Establish User Groups for Requirements Gathering and Beta Testing. PCIA strongly urges the FCC to establish *ad hoc* user groups (at least one user group per legacy database, drawn from a representative cross section of stakeholders and users) to furnish specific requirements, serve as testers, and even perform independent verification and validation roles. These groups should meet in person/virtually/via webinar on a regular basis until their portion of the migration and implementation is completed.
- Perform a Soft Launch and Operate Parallel Systems Until Bugs are Worked Out. The scale and nature of this type of transformation will require potentially substantial business process re-engineering, overhauling specific procedures, and undertaking an extensive and intricate mapping of a complex, mission-critical database. All of these activities invite the potential for error. PCIA recommends that a hard cut-over occurs only after there is certainty that a large majority of the inevitable problems have been identified and resolved.
- Develop a Robust and Comprehensive Communication Strategy. One of the keys to success in any major change effort is a solid communication plan to keep stakeholder groups apprised of the status of the impending change and how the change will directly or indirectly impact them and their constituents. PCIA recommends that the Commission leverage multiple communication channels to ensure stakeholders are adequately informed.

Specific Recommendations: Antenna Structure Registration (ASR) Database

- Applications:
  - Determining whether a tower requires registration
  - Registering a tower
  - Searching for registered towers/ASR #
- Average Application Processing Time:
  - Automatic with an FAA Determination Number
  - FAA Determination Number takes an average of 2-3 weeks
- Recommendations:
  - Provide Form 854R Electronically. The form is currently a paper copy form that the FCC mails to the tower owner. The tower owner then provides copies to tenants (licensees/permittees). PCIA filed a petition for rulemaking on this issue, requesting the form be made available electronically. We urge the FCC to act on the request.
  - Include Threshold Question to Minimize Duplicity. Currently, there are several duplicate records in the system. At one time, each licensee filed for registration. Part 17 Rules, revised in 1995, placed the filing burden on the tower owners, which eliminated most but not all of the duplication. Including a threshold question on Form 854R to determine if the applicant is the structure owner would help mitigate further duplication.

Specific Recommendations: Antenna Structure Registration (ASR) Database

- Recommendations (continued):
  - Link ASR Data to Other Data. PCIA recommends linking ASR information to other data to make it more usable. For example, users should be able to use an ASR# to locate site-based licensees (i.e., microwave) that are on that tower. This would also allow users to renew licenses by entering an ASR# and accessing site-based licensing information that way.
  - Enable Improperly Registered Towers to be Deleted from ASR. There are instances in which the original owner of the tower registered a tower even though registration was not required. For example, when the FCC revised Part 17 rules, a number of companies registered their towers in an abundance of caution. Doing so obligated them to a host of regulatory requirements, including maintaining marking and lighting. In a transfer of ownership, the acquiring company would like to delete that improperly registered site. Currently, there is no process for that except to file a notice of dismantlement .
  - Link ASR to the FAA Database. Once the user enters the FAA Determination Number into ASR, the remaining fields should populate automatically. Doing so would preserve data integrity and save time as most of the fields are duplicative.

Specific Recommendations: Antenna Structure Registration (ASR) Database

- Recommendations (continued):
  - Revise Form 854 to Allow Parties to Seek a Waiver. There are many instances in which certain pieces of information are not known. Currently, the ASR requires applicants to "make up" information in order to get past the field and complete the process. PCIA recommends that Form 854 be revised to allow parties to seek a waiver if the information is unknown or include a comment if the answer to a question is not clear or requires explanation.
  - Expand Search Results. Currently, users are limited to 10 search results. However, many tower owners have large portfolios. PCIA recommends that this search limitation be removed or greatly expanded. PCIA further recommends that users be able to sort search results, i.e., by coordinates, tower owner names, name of a town, etc. Finally, PCIA recommends that the FCC employ data validations to flag incorrect or incomplete information. For example, if a town name were to be entered incorrectly (i.e., misspelled), the system should perform edit checks to validate the data and flag incorrect or incomplete information.
  - Add County to ASR. Currently, ASR does not require county, but other databases (e.g., ULS) do. PCIA recommends adding County information to ASR so that when ASR data is imported to ULS, it will auto-populate the county field.

Specific Recommendations: Universal Licensing System (ULS)

- Applications:
  - Gathering information to use in the assignment of frequencies or resolution of related issues
  - File applications for licenses with the FCC
- Average Application Processing Time:
  - Two weeks
  - One to four months if Canadian concurrence is required
  - Others that are out for review…..????
- Recommendations:
  - Improve Speed of the Database. Numerous users complained about the speed of ULS, particularly during the mid afternoon timeframe. For example, one customer recently spent 4.75 hours performing a function that should have taken 1.5 hours. There is concern that if the sluggish performance is due to volume that a consolidated database with exponentially more users will lead to even more delays. PCIA urges the FCC to investigate this problem and resolve any issues/optimize systems before migrating to CLS.

Specific Recommendations: Universal Licensing System (ULS)

- Recommendations (continued):
  - Increase Visibility of Where an Application is in the Process. Currently, if an application is "out for review" the licensee or their third-party representatives have no visibility as to what the review concerns or when the application is expected to be finalized. A typical example is petitions (i.e., construction notifications). The matter is assigned a number, but there is no place for the petitioner to see where it is in the process. Improved visibility and allowing third party representatives access to this information would be a great improvement. PCIA further recommends that in the case of license assignments/transfers that the assignee/transferee should have visibility of where the application is in the process – not only when they fill out Form 603.
  - Implement an Intuitive FRN Password Reset Procedure. The FRN is a good idea, but PCIA recommends that the Commission institute procedures similar to those in other web environments to reset passwords.
  - Minimize Drill-Down. Currently, considerable drill down is required to access certain key data. For example, after a call sign is entered in the license search box, it takes three additional steps to view the emission designator, construction date, or an attachment.
  - Allow FRN Amendments for Pending Applications. Currently, frequency advisory committees are unable to file applications in certain radio services using the coordinator login credentials. PCIA has encountered several situations in which the applicant informed PCIA that they had provided the wrong FRN, but PCIA had no way of amending the FRN in the pending application.

Specific Recommendations: Universal Licensing System (ULS)

- Recommendations (continued):
  - Make the Database More "User-Centric." ULS is challenging to navigate for casual or novice users.
  - Enable Licenses to be Consolidated. The CLS should enable a user to consolidate all licenses for each licensee.
  - Modify the Pay Fee Feature to Correctly Identify Actual Payer. Currently, with Assignments and Transfers, Form 159 identifies the Assignor/Transferor as the payer. However, the actual payer is the Assignee/Transferee. PCIA recommends that ULS be changed to reflect this standard arrangement.
  - Preserve the features of the ULS General Menu. PCIA suggests that the planned CLS search features should take their cues from the ULS General Menu as it provides a comprehensive view of the status of the license as well as important details concerning the license.

Connie E. Durcsak

Senior Director, Industry Services
PCIA
www.pcia.com

Executive Director
The DAS Forum
www.thedasforum.org

connie.durcsak@pcia.com
Direct: 703.535.7451
Toll Free: 800.759.0300